The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
(617) 983-6622

Drug Analysis Laboratory – Key Terms

Evidence Handling	
Drug Receipt	Created when evidence is submitted to the drug lab. Contains a description of the item, initial gross weight of sample, and assigned lab number.
Evidence Control Card	Generated from information on the Drug Receipt. Chemists record findings about each sample on cards. Card stays with sample until it is returned to the evidence officer.
The Safe	Where samples are stored before and after testing.
Drug Certificate	A document that reports the findings of the chemist(s) on a particular sample. Signed by the chemist(s) and notarized.
Chemist Drug Analysis Sheets (also known as Powder Sheets)	Hand notation kept by chemist detailing tests performed.

Preliminary Tests	
Spot Test	Preliminary screening test
Reagent	A mixture of different chemical compounds. Used in Spot Tests.
Cobalt Thiocyanate Reagent	Reagent used in Spot test to test for the possible presence of Cocaine.
Marquis Reagent	Reagent used in Spot Test to test for the possible presence of a number of substances including Opiates, MDMA and methamphetamine.
Froehdes Reagent	Reagent used in Spot Test to test for the possible presence of Heroin and other Opiates.
Meckes Reagent	Reagent used in Spot Test to test for the possible presence of Heroin and other Opiates.
Microcrystalline tests	Performed if there is a positive Cobalt Thiocyanate test. Cocaine will form specific crystalline shapes when reagents are added.
Gold chloride (AuCI)	Reagent used in Microcrystalline tests to test for the presence of Cocaine.
di-p-toluoyl-l-tartaric acid (TLTA)	Reagent used in Microcrystalline tests to test for the presence of Cocaine.

Confirmatory Test	
Gas Chromatography-Mass Spectrometry (GC-MS)	Instrument used to confirm or rule out the presence of an illicit narcotic. Separates all compounds in a mixture and breaks them down to ions. A chromatogram of the substance's makeup is generated. The chromatogram of the unknown substance is compared to a known standard.
Aliquot	A small amount of sample.

Marijuana Testing	
Macroscopic	Observable by the naked eye.
Microscopic	Smaller than can be seen by the naked eye. A lens or microscope is needed for observation.
Cystolithic Hairs	One of two types of hairs present on Marijuana. Shaped like "Bear Claws"
Glandular hairs	Second of two types of hairs present on Marijuana.
THC (delta 9- Tetrahydrocannabinol)	Psychoactive component of Marijuana.
Duquenois-Levine test	Tests for the possible presence of THC. A purple color change can indicate the presence of THC.

Rx Testing	
Ballistics	Compound identification by markings (shape, color & imprint)
Pharmaceutical Reference	Software or books that identify the marking of controlled drugs.